

Policy Research

WORKING PAPERS

Financial Advisory Services

Confining and Financial Advisory
Services Department
The World Bank
December 1991
WPS 817

How Does Brady-Type Commercial Debt Restructuring Work?

Mohua Mukherjee

What happens when, in response to a country's request, creditors agree to negotiate to reduce the burden of outstanding commercial debt?

This paper is a product of the Financial Advisory Services Group, Cofinancing and Financial Advisory Services Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Yolanda Arellano, room Q5-113, extension 31379 (22 pages). December 1991.

The Brady Plan is a pragmatic approach to debt restructuring that combines the relatively recent feature of debt and debt service reduction and the support of official creditors. The underlying premise of those adopting the Brady Plan is that the existing stock of debt can never be fully serviced, even though the country has embarked on a far-reaching adjustment program.

To date, only a handful of countries (Costa Rica, Mexico, Uruguay, and Venezuela) have successfully concluded their debt reduction negotiations through a Brady Plan with commercial creditors. Others, such as the Philippines, have engaged in Brady-type debt reduction for part of their outstanding commercial debt.

Mukherjee explains what happens when, in response to a country's request, the creditors agree to negotiate to reduce the burden of outstanding commercial debt. She discusses the following questions:

- What factors influence the extent of debt relief that a commercial bank can offer?
- What is a good deal for the country? What is the preferred mix (for the country) between debt reduction and debt rescheduling? What considerations should the country take into account?
- What is a good deal for the banks? How do banks of various nations reconcile their different interests in the country? (Some expect to continue doing business there; others want to cut their losses and exit.) What about a bank's fiduciary responsibility to its depositors and shareholders?
- What about other creditors of the country, such as holders of its sovereign bonds, or other governments or multilateral agencies? Will or should commercial banks be the only ones to offer relief by taking losses?
- What is the country's proposed strategy for seeking future financing from private sources, director foreign investment, and international capital markets? How will a debt reduction operation affect the country's access to commercial and private sector finance in the future?
- How much support can be expected from multilateral and bilateral institutions to finance a debt reduction operation? Mukherjee summarizes broad guidelines used by the IBRD and IMF.

The Policy Research Working Paper Series disseminates the findings of work under way in the Bank. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official Bank policy.

Overview

I.	Introduction ^a	1
II.	The Baker Approach.....	1
III.	The Brady Plan.....	3
IV.	Preconditions/Factors Influencing a Debt Reduction Operation.....	4
	1. The country has embarked on an adjustment program, but existing claims are still acknowledged to be partially irrecoverable.....	4
	2. There is activity in the secondary market for claims to the country, indicating differing expectations regarding the probability of full debt repayment.....	4
	3. The secondary market price as a benchmark.....	5
	4. Is there a debt-equity conversion program?.....	7
	5. Are creditors in a position to voluntarily grant relief/accept losses?.....	8
	6. Who are the country's major creditors?	9
V.	The Decision Faced by Banks: To exit or not to lend new money?	10
VI.	The Free Rider Problem in the Context of a Commercial Debt Workout	11
VII.	An Illustration of the "exit or stay in" Choice.....	12
VIII.	Additional Considerations--Partial Exit	13
IX.	Securitization/Collateralization of Exit Bonds	15
X.	The Zero Coupon Security	15
XI.	The Role of Zero Coupon Instruments as Principal Collateral	16
XII.	The Interest Collateral Account	17
XIII.	Illustration of a Debt and Debt Service Reduction Operation	17
XIV.	Building the Menu	18
XV.	The Cost of Financing the Menu	19
XVI.	The Role of Multilateral Institutions	20

^a Most of the pre-Brady Agreement information has been adapted from Market Based Menu Approach, CFS Informal Financial Note #1, September 1988

I. Introduction

The purpose of this note is to illustrate the principles involved in the restructuring of a country's outstanding obligations to commercial banks. Banks' attitudes towards the treatment of troubled loans have evolved considerably since the inception of the debt crisis. A pragmatic approach to debt restructuring which combines the relatively recent feature of debt and debt service reduction (DDSR) and the support of official creditors is commonly referred to as the "Brady Plan".¹ To date only a handful of countries (Mexico, Costa Rica, Venezuela and Uruguay) have successfully concluded their debt reduction negotiations through a Brady Plan with commercial creditors. Others, such as the Philippines, have engaged in Brady-type debt reduction for a portion of their outstanding commercial debt.

II. The Baker Approach

From 1982 to 1989, banks attempted to offer relief to debtors on a case-by-case basis using reschedulings and so-called concerted new money operations. The initial stage of the concerted lending approach reflected the perception that the debt servicing difficulty was a temporary phenomenon, giving rise to the need to "buy time". Indicators of indebtedness were rising because real interest rates on past debt exceeded the economy's real growth rate. The Baker approach, formally adopted under the Baker Plan of October 1985 but in practice since 1982, was to provide the necessary interim support to highly indebted countries so that export and GNP growth could once again surpass real interest rates, and thereby restore the country's ability to pay. This was referred to as "growing out of debt".

Support from all of the country's creditors was organized for financing balance of payments gaps with a view to supporting the adjustment and growth process. The debtor government would

- accept an IMF or World Bank adjustment program,
- negotiate rescheduling of principal and interest repayments on official debt contracted with the Paris Club before a specified cutoff date, and
- negotiate rescheduling of all principal maturities falling due on commercial debt within a specified period, and sometimes provide some new lending (usually less than total interest payments due).

The stock of old debt was thus left intact and the repayment period was extended, typically with a grace period during which only interest payments were due on the entire outstanding balance. In addition to rescheduling, commercial

¹ In 1988 and 1989, former Finance Minister Miyazawa of Japan, President Mitterand of France and US Treasury Secretary Brady made proposals to include debt and debt service reduction more formally in the debt management strategy and to promote some form of official support for such transactions.

creditors agreed to maintain trade and interbank short-term credit lines at specified minimum levels.

Such "concerted packages" were becoming more and more difficult to assemble, however, as skepticism grew in the commercial banking community about improved repayment prospects of the debtors. The extensive set of contractual provisions such as sharing clauses, negative pledge and pari passu covenants that had initially been helpful in facilitating the cohesion of commercial banks, were no longer sufficient to maintain solidarity.

In response to these increasing strains, a market-based menu approach began to emerge, recognizing the diverse interests and constraints of creditors and providing more flexibility. The menu approach implicitly reflected the longer-term framework that the debt crisis required, and was intended to provide countries with both time and debt relief, including, in some cases a negotiated and market-based reduction of debt obligations. New money requests (e.g. Argentina in 1987, Brazil in 1988) included features that were aimed at encouraging a prompt response on the part of commercial banks. The introduction of such features represented the beginnings of what is commonly understood to be the "Brady-type" approach today.

A number of restructuring and new money agreements in 1986-88 saw the introduction of diversified financial techniques such as currency redenomination and interest rate switching options being offered by debtors to creditors. Banks were granted the option to redenominate the existing loans in their domestic currencies, providing them with an asset management technique that could reduce funding risks, mitigate the effect of exchange rate volatility on capital-asset ratios, and lower funding costs in the case of non-US dollar based banks. Currency redenomination options exist in restructuring agreements with Argentina, Brazil, Chile, Nigeria, Mexico, Philippines, Venezuela, Uruguay and Yugoslavia.

Interest rate options provided creditors with alternative interest rate bases to which a margin was added for various eligible currencies. Banks could choose LIBOR, a domestic rate, or the prime rate. By lending at floating rates, creditors were reducing or eliminating interest rate risk, but because that uncertainty was passed on to the borrower, the interest rate risk reduction was achieved at the expense of increasing their own repayment risk. The weight of floating rate debt in total liabilities was clearly an important destabilizing factor in LDCs' external positions during periods of sharp fluctuation in interest rates. Interest base options were included in debt restructuring agreements with Argentina, Chile, Mexico, Nigeria, Philippines, Uruguay and Venezuela.

Most regional and small-exposure banks, however, were striving to redirect their lending towards traditional domestic and trade financing business, and some were eager to leave the overseas lending process even at the cost of significant write-downs of assets. Net flows (disbursements minus principal repayments) from banks underwent a drastic contraction since 1984 and total net transfers (net flows minus interest payments) have largely remained negative since the inception of the debt crisis. By any measure, the relief provided to debtors through the "conventional approach" proved to be insufficient, and a number of countries after

requesting repeated reschedulings, found themselves unable to meet even the interest obligations.

III. The Brady Initiative

The need for commercial debt reduction (or debt service reduction) is recognized from the moment when both a country and its commercial creditors conclude that the existing stock of debt can never be fully serviced, even though the country has embarked on a far-reaching adjustment program. The Brady Initiative has given official blessing and encouragement to including debt reduction in negotiations and has offered official sector support. The role of multilateral institutions would be to provide partial financing for "enhancing" such commercial debt reduction agreements. This note explains further what happens when, in response to a request by the country, the creditors agree to negotiate to reduce the burden of outstanding commercial debt. This immediately raises a number of dilemmas for both the country and the creditors, since the creditors are explicitly agreeing to recognize some losses:

- (i) what is the limit to the "relief" a commercial bank can offer?
- (ii) what is a "good deal" for the country? the preferred mix between debt reduction and debt rescheduling? what considerations should the country take into account?
- (iii) what is a "good deal" for the banks? how do banks of various nationalities reconcile their differing interests vis-a-vis the country? Some expect to continue doing business there, while others want to cut their losses and exit;
- (iv) what about other creditors of the country, such as holders of its sovereign bonds, or other governments, or multilateral agencies, etc? Will/should commercial banks be the only ones to offer relief by taking losses?
- (v) what about a commercial bank's fiduciary responsibility to its depositors and shareholders?
- (vi) what is the country's proposed strategy with respect to seeking future financing from private sources/direct foreign investment/international capital markets? How will a debt reduction operation affect the country's access to commercial/private sector finance in the future?
- (vi) how much support can be expected from multilateral and bilateral institutions, to finance a debt reduction operation?

There are no readily available solutions to these questions. For obvious reasons there is no established precedent to questions such as "how much debt should be forgiven?" All commercial debt reduction is the result of a case-by-case negotiated outcome. However, a few general principles have been established as a result of experience accumulated to date, and countries which are currently in

discussions with their commercial creditors are attempting to approach the issue based on these principles. The presentation which follows is a condensed account of what has emerged from numerous iterations of proposals and counterproposals between a debtor country and its Bank Advisory Committee, until something could be agreed on which reasonably satisfied both parties' interests.

IV. Preconditions/Factors Influencing a Debt Reduction Operation

1. The country has embarked on an adjustment program, but existing claims are still acknowledged to be partially irrecoverable

In spite of economic reform measures taken by the country to improve, among other things its creditworthiness, existing claims no longer look attractive because the creditor recognizes that the probability of receiving full and timely payments of interest and amortization of principal is low and falling due to adverse circumstances. At the same time, creditors and debtors have a shared interest in bringing about an improvement in the debtor's economic situation. Before "losing everything" the creditor has an incentive to negotiate a new set of legally binding agreements that protects his claims as far as possible. By lowering claims today and giving the country a chance to benefit from adjustment, the creditor expects to increase the chance of receiving the remaining contractual payments, and to share in the future gains from policy reform.²

2. There is activity in the secondary market for claims on the country, indicating differing expectations regarding the probability of full debt repayment.

The number and sizes of transactions in the secondary market for international bank loans are driven by economic and debt policy developments in debtor countries. These, together with banks' portfolio strategies and regulatory regimes affect creditors' expectations on whether countries are able and willing to service debt obligations. Similar actions by other major banks have led to a perceived surplus of LDC loans, causing prices (in cash and swap terms) to decline in most cases.

Despite the great deal of attention that it has attracted, the overall size of the secondary market is still marginal compared with that of LDC external debt. The market remains thin, and the number of countries whose debt is actively traded is limited to a handful of debtors. The prices for LDC loans are therefore often notional, and it could be misleading to interpret them as being "voluntarily" applicable to any large scale transaction.

² All debt reduction agreements to date have also included explicit "recapture clauses". These entitle participating creditors to increased repayments in future in the case of a windfall due to commodity price increases (e.g. in the Mexico and Venezuela agreements, creditors receive additional payouts if the oil price rises above a trigger value).

The majority of secondary market transactions have been asset trades between commercial banks. These take the form of par debt swaps (trades of LDC loans without changing the terms of payment) for portfolio balancing reasons, or debt for cash swaps. Portfolio adjustments are aimed at consolidation, diversification, liquidity and tax liability reduction. It is estimated that two-thirds of secondary market transactions are done for the purpose of rearranging bank portfolios or for accounting reasons. Cash sales of debt, on the other hand, give small exposure banks a way out of the debt rescheduling/new money process. Small exposure creditors often respond to a situation of protracted debt servicing difficulty by simply selling their future claims on a debtor in the secondary market for less than face value.

3. The secondary market price as a benchmark

The bid/offer prices currently quoted in the secondary market are in some sense a benchmark in indicating to a country the levels of losses that a few of its creditors are willingly accepting.

It is important to note that in the following illustration of a debt for cash sale at a discount in the secondary market there is no impact on the situation of debtor country:

Total Outstanding Commercial Debt: US\$100 million

Creditor A's share: US\$10 million

Creditor A sells his entire exposure in the secondary market at 30% of face value.

A buyer pays US\$3 million to creditor A and becomes the new holder of a US\$10 million claim on the country. (If there is no debt-equity conversion program ongoing in the country, then the purchase may be driven by portfolio balancing or speculative motives).

The country's outstanding debt remains at: US\$100 million.

Creditor A took a loss of US\$7 million and retired his exposure, but did not enter into negotiations with the country.

The country is not able to benefit from the fact that Creditor A is willing to exchange his \$10 million claim for a cash payment of \$3 million. If the country had entered into the same deal instead of the buyer in the secondary market, it would now have a debt outstanding of \$90 million. However, reserves would be lower by US\$3 million.

There are legal clauses in existing loan agreements which prevent countries from being able to directly capture the discounts in the secondary market price of their debt. The sharing clause in a typical syndicated loan agreement, for example, specifies that a payment made by the debtor to any member of the syndicate must be

shared on a pro-rata basis with all other members. This poses a legal obstacle for debtors to buy back their own obligations from an individual creditor. Waivers on prepayment provisions, sharing clauses and pari-passu clauses (equal treatment for all creditors) must first be obtained from all other creditors. This is a lengthy and complex process when undertaken independently of a comprehensive debt workout, and may not be successful.

The likelihood of obtaining the waivers will be greatly influenced by expectations of what creditors can expect to gain by refusing to grant them. There is clearly a tradeoff from the creditor's viewpoint: reserves may be used either to buy back debt at a discount, or creditors may insist that they be used to continue scheduled debt service. There are also conflicting interests between banks whenever the possibility of some exit is introduced. At such moments, there is the greatest convergence of interest between the country and the subset consisting of its long-term creditors: both would like to see as much debt reduction through buyback as possible, at the greatest possible discount.

In July 1987 Bolivia and its commercial bank lenders reached an agreement to allow Bolivia to repurchase all or a portion of its bank debt. Under the proposal, a portion of the principal and unpaid interest was to be reduced by a buyback transaction, and the remaining debt was to be restructured. The creditor banks insisted that the funding for the buyback had to come from additional, official donor grant finance specifically earmarked for the repurchase of the debt at a substantial discount. The IMF was willing to act as administrator of the voluntary contributions to a Trust Account. The indicative price of Bolivian debt was around 10-12%. On March 18, 1988 Bolivian authorities announced that 53 of its creditor banks had tendered over US\$335 million of eligible debt, almost US\$270 million in exchange for cash and about US\$65 million in exchange for investment bonds under the newly established debt conversion program. This transaction required US\$28 million from the IMF Trust Account and extinguished forty percent of Bolivia's commercial indebtedness.

The net benefit from a debt repurchase stems from the difference between the opportunity cost of using scarce foreign exchange for prepaying external obligations and the resulting reduction in the country's external debt. The cash flow benefit is clearly maximized if a third party finances the repurchase and subsequently forgives all of the debt³. The timing of a debt buyback scheme is crucial, in that it should optimally take place when the discount on the debt is the greatest and does not yet reflect expectations of an improvement in the country's economic and financial profile.

Provided the debt repurchase is strictly voluntary and does not affect the country's liquidity position, (i.e it is financed with grants) the lower contractual value of remaining bank debt would confer an indirect benefit on the banks retaining their claims, by raising the probability that their debt would be serviced in future.

³ Assuming the money would not have been available for other uses.

Any unilateral action by a country in trying to enforce a repurchase price that is not the market-clearing one for a given quantity of debt could damage the country's track record in the creditor community and be ultimately harmful if the country hopes to receive future lending from a subset of its creditors who may have a long-term business interest. It would also lower the country's prospects of attracting direct foreign investment or tapping new foreign private sector funding sources in future, leaving recourse to only multilateral and bilateral assistance, which would also be affected negatively.

To summarize, therefore, the secondary market price is a less than perfect indicator in estimating the total amount of discount at which the country can hope to retire all or most of its debt, for the following reasons:

- (i) waivers must be obtained from all creditors; these will probably only be granted if it is perceived that the debt repurchase will be truly voluntary;
- (ii) the secondary market for most LDC debt is illiquid in the absence of a debt-equity conversion program; only marginal transactions take place, and the majority of creditors will not voluntarily relinquish their claims at the market price;
- (iii) creditors are not homogeneous; they evaluate their options differently;
- (iv) creditors are subject to differing tax and regulatory regimes in their home countries and their long term expectations and interests in the debtor country diverge. This affects the amount and form in which they may grant debt relief.

4. Is there a debt-equity conversion program?

A debt equity conversion program, whereby the country offers to repurchase its external obligations using local assets can be a useful method for the country to capture some of the prevailing discount in the secondary market. In essence the country invites interested investors to purchase its obligations for cash in the secondary market and to trade them in for a local security which is used for domestic investment or the purchase of a domestic asset. The terms at which the exchange takes place (i.e the government repurchases its obligations from the investor who has bought them) are subject to negotiations or an auction. This is also a way of promoting foreign investment through an implicit premium on the exchange rate, while at the same time promoting competition among interested foreign investors.

However, the process described above may be inflationary if narrow money supply increases for repurchasing public sector obligations and the equity investments actually take place in the domestic private sector. If the same debt equity conversion process is carried out in the context of a privatization program where the debt is exchanged for existing assets without the introduction of local currency into the transaction, then there is little risk that monetary aggregates will be affected (unless there is crowding out of domestic investors). Depending on how

the transaction is carried out, the government may be able to directly swap its liabilities to commercial banks for its equity in an enterprise, i.e the right to share in future profits of the enterprise. Following this transaction, the government's debt is reduced, and its only remaining "liability" consists of permitting the repatriation of profits after a suitable period. (It is referred to as a liability here in the sense that the government must be willing to sell foreign exchange to the investor at the official rate for the purpose of transferring earnings out of the country). The added advantage to this is that such a liability is matched with the business cycle of the domestic economy, unlike the debt service obligations. When the economy does well, higher profits are earned by the enterprise and the government is also in a better position (regarding availability of foreign exchange) to permit repatriation of increased profits, and vice versa.

The budgetary impact of a privatization through debt equity conversion would have to be taken into account, comparing the amount of debt service obligations cancelled with the amount of revenues foregone from the enterprise. If the privatized unit had previously been a loss-making one, there would clearly be a net positive budgetary impact, resulting from both a reduction in subsidies and in debt service.⁴ If it is widely expected that the enterprise will be better managed under private ownership (or if the government has consented to regulatory changes that will increase profitability) then the government may be able to charge a higher price (extinguish more debt) in exchange for the enterprise. If an auction is used to price the enterprise, the "improved management premium" effect is expected to be reflected in the winning bid.

It is widely observed that for countries with attractive investment possibilities, the announcement of such a program leads to an increase in the secondary market price of debt. The Chilean debt equity swap program, initiated in May 1985, remains the largest, best established and most flexible arrangement of any developing country. Mexico and Argentina have also reactivated their programs recently, and have accomplished the successful privatization of important public sector assets (telephone company, airlines) through this mechanism. A number of others, such as Nigeria, Costa Rica, Jamaica, and the Dominican Republic, to name a few, have also launched conversion programs.

5. Are creditors in a position to voluntarily grant relief/accept losses?

Following the inception of the debt crisis in 1982, creditor governments responded by taking coordinated actions to protect the international banking system. Tax and regulatory policies used to accomplish this objective took different forms, but banking supervisors in all countries required the establishment of general provisions (loan loss reserves) to cover possible losses on doubtful loans. The so-called Basle guidelines have been drawn up with the purpose of eliminating, over time, many of the inter-country differences that exist in the regulatory treatment of

⁴ However, in practice loss-making entities are harder to sell through debt equity conversions unless these are accompanied by permission to change policies such as pricing, production, hiring, etc.

loan loss reserves. Although not a part of the Basle agreement, regulators in all major creditor countries have now specified lists of troubled debtors and have indicated mandatory minimum levels of provisions that banks must establish to cover all exposure to these countries. These mandated reserve levels vary by creditor nationality, with the result that some creditors could be a little better provisioned than others. This may have the effect of:

- 1) lessening the urgency for such creditors to participate in a debt workout, or
- 2) ultimately allowing such creditors to grant greater concessions.

For example, a bank that has established a high level of reserves in a country where these are not considered a part of capital has effectively lowered its cost of not participating in debt reduction/new money packages. Being well-reserved, the bank can write down loans when arrears build up without affecting regulatory capital and without necessarily granting concessions to the debtor. A less well-reserved bank, or a bank in a country where reserves are considered part of capital may conclude that the costs of participating in a debt workout/new money package is less than the cost of having to write down loans and reduce regulatory capital. As a result, the less well reserved bank might choose to lend new money while the well-reserved bank might initially try to free ride, or prefer to exit if the exit price is attractive. In some countries provisions must immediately be established against new money loans, thus reducing the attractiveness of this option for banks.

6. Who are the country's major creditors?

Many banks in the major creditor countries are currently operating at or near the minimum capital-asset ratios (adjusted risk asset ratios) mandated by their domestic banking supervisory authorities. This is in spite of considerable balance sheet restructuring following the adjustment of risk weights for LDC exposure in the bank's portfolio i.e selling some of the riskier assets and/or raising new capital. The regulatory treatment of loan loss reserves therefore becomes crucial in two areas:

- (i) the effect of such reserves on capital, and
- (ii) the tax treatment of such reserves.

A marginally capitalized bank is clearly at an advantage if it is permitted to include its general loan loss reserves as part of its regulatory capital. This is permitted only in France, the US and to a limited extent in Japan. However, once losses are realized in the context of a debt reduction operation for such banks, an upfront capital loss must be registered as the reserve is charged off. It is to be expected a priori, therefore, that most French and US creditors who are otherwise inadequately capitalized, will only be able to accept debt exchange instruments which protect the face or par value of their exposure as far as possible.

The other incentive available to banks to establish adequate loan loss reserves depends on whether such reserves are tax deductible. Here again, the

creditors differ by nationality. German and French banks can deduct loan loss provisions from taxable income, but US banks cannot. For Japanese and UK banks, tax deductibility is limited to levels below the actual amount of provisions. Favorable tax treatment of provisions (as in Germany and France) may reduce incentives for banks to dispose of LDC assets, either through debt reduction operations or on the secondary market, since this would imply losing the source of the tax deduction.

V. The Decision Faced by Banks: To exit or to lend new money?

Commercial banks express concern about the issue of “burden sharing” when it becomes obvious that a debtor is unable to service its obligations.⁵ In particular, they are concerned that their fellow creditors should receive equal treatment in terms of taking losses on existing exposure, so that no creditor emerges from the debt reduction in a more favorable position than the others.

Commercial banks value their debt differently because of:

- differences in expectations regarding the prospects of the debtor;
- different business interests/expertise/length of relationship with a particular debtor;
- different tax and regulatory environments, including level of ownership or involvement by their government;
- different loan-loss reserve positions;
- different business strategies, e.g shift from loan to underwriting; from LDC to Euromarket; from long-term lending to short-term trade finance etc.
- desire to increase portfolio diversification.

There are essentially three ways for an individual bank to respond when confronted with a request for debt reduction. It may

- choose to accept a loss upfront by accepting a cash payment or reduced value asset from the debtor, which covers only a part of what it was originally owed, or
- choose to lend new money to the debtor, some of which may be used to repay the existing obligations, or

⁵ As a prerequisite to eligibility for debt reduction, the debtor country itself is called upon to adjust faster than it might otherwise have done, owing to the sharp reduction in external finance.

- do nothing.

The first two options pose a burden on the creditor since the history of the new money process has not been inspiring. Most creditors in fact face an immediate cost if they choose to lend new money, since they are required to set aside a provision out of earnings, for loan losses on their additional exposure on the new money. The third option has regulatory costs, which vary according to the nationality of the creditor.

VI. The Free Rider Problem in the Context of a Commercial Debt Workout

Creditor participation is the most crucial element for any successful resolution to a country's debt problem. A successful resolution is defined in this case as a minimum of "free ridership" on the part of commercial banks. This term refers to the phenomenon whereby some banks refuse to choose any of the exchange instruments offered to them, but continue to hold out for their original claims to be serviced. The argument is that once the others have chosen one or more of the options and have reduced their claims, the country should be in a better position to service the free riders according to the original agreements.⁶ Sharing and pari passu clauses in the loan agreement, which guarantee all creditors a pro-rata share of any debt service paid by the debtor, provide the legal mechanism for the free ride.

Some debtor countries have tried to control this type of behaviour by specifying that a particular menu of options is valid only if a sufficient number of creditors subscribe to the deal. This transfers the burden of ensuring compliance on the part of would-be free riders to the other members of the London Club who are anxious to conclude the deal⁷. Other countries have instead tried to make the menu more attractive, and thereby minimize the temptation to free ride.

Experience has shown that the process of designing a Brady-type comprehensive financing plan is often lengthy and iterative. The most constructive negotiating experiences have been characterized by close and regular contact between a well-prepared Debt Management Team from the debtor country and the Bank Advisory Committee.

⁶ In the case of troubled sovereign debt, the term "cheap rider" is increasingly used rather than "free rider". It refers to the same set of banks, but allows for the fact that they have also sacrificed something in the sense that their existing claims have not been fully serviced. Thus, the argument goes, they are trying to get off "cheap" rather than "free".

⁷ London Club refers to the community of commercial creditors for a particular debtor. The Paris Club refers to the country's official creditors (bilateral and multilateral).

VII. An Illustration of the "exit or stay in" Choice

Suppose that a debtor faces the following amortization profile at end 1991 on existing obligations of US\$100 million, interest rate fixed at 10%, applied to outstanding debt stock: (all figures in US\$million)

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Principal Repayment	40	40	30	10	10	10
Remaining Debt Stock	100	60	30	20	10	0
Interest Due	10	6	3	2	1	0
Annual Debt Service	50	46	33	22	11	10

Suppose this debt burden is not compatible with the country's expected ability to pay, and the prevailing secondary market price of the country's debt is 27 cents, reflecting the market's expectation regarding the probability of repayment (or the expected present value of repayment per dollar of outstanding debt).

The country may present the following offer to its creditors at year-end 1991:

- A cash buyback at 30 cents, OR
- Repayment over 17 years with 7 years of grace, at LIBOR+.5%, AND New Money equal to 20% of existing exposure, over 15 years, 7 years grace, at LIBOR+1.5%

It is assumed that creditors respond to the offer as follows:

US\$60 million of outstanding obligations are tendered for Buyback
 US\$40 million are rescheduled, resulting in
 US\$8 million of new money obligations.

Following the buyback of US\$60 million, and the addition of new money, the country's debt stock has fallen from US\$100 million to US\$48 million.

All menu driven debt reduction agreements are based on the premise that creditors differ in their strategy with respect to both their long-term business interests in LDCs, and the protection of their existing assets. Choices are made based on the individual circumstances of each bank. Exit instruments are aimed at small-exposure banks with no long-term interest in the country, who are therefore

reluctant to provide new money. Exit through a cash buyback indirectly benefits the remaining creditor banks by the future debt service relief it offers to the debtor, and the higher probability that remaining claims will be serviced out of a limited cash flow. This is not to say that remaining creditors do not “take a hit”, however. The options are specifically designed so that a priori there is equal burden sharing built into both. Thus, the major principle guiding the construction of a menu is to design instruments of similar cost to the debtor but which offer differing values to various categories of creditors, in order to maximize concessions from them and obtain the best overall deal.

VIII. Additional Considerations--Partial Exit

The basic choice faced by the creditor is to exit or lend new money, as described above. However, in practice, there are some refinements to the total exit option, which offer creditors the ability to “partially exit”. Creditors choosing a partial exit option do not lend any new money. They receive enhancements and either give up a share of the principal or they accept lower interest payments. One may ask, if the debt service streams under all options offered to creditors are in any case equivalent in net present value terms⁸, why would some banks choose partial rather than complete exit? The answer is that such banks are unable to afford the extremes of either a complete exit or a new money commitment for balance sheet (accounting), fiscal and regulatory reasons. This suggests a need for additional instruments which offer partial exit to creditors. Also, a country may not be able to fund a full buyback and may have to structure a menu to meet its own resource constraints.

Experience of debt workouts to date has in fact illustrated the need for debtors to offer a richer menu of options to creditors than just the buyback and new money options. Offers to exchange loans for bonds (long term securities) have been a successful means of matching:

- the creditors’ needs for a partial exit instrument with greater liquidity than their existing claims, and
- the debtors’ need for cash flow relief on debt service.

Partial exit is accomplished either through:

- sacrificing the recovery of full interest payments on the existing claim,
- or through the write-off of a portion of principal on the existing claim.

⁸ Using the applicable discount factor, based on the yield to maturity model.

Reduction of interest or principal as the means of partial exit will be chosen largely based on balance sheet (accounting) strategies, and fiscal and regulatory constraints of each individual creditor, once the decision to exit has been made.⁹

In the first case, the debtor offers to exchange existing claims for a long term security with a below market interest rate, and a face value equal to the existing obligation. This is a par bond. The creditor is thus able to exit partially through a stream of below market interest payments for e.g 30 years, while maintaining the principal value intact after the exchange. The loss accepted by a creditor choosing the par bond is that he has a fixed revenue stream based on a below-market interest rate, while his funding costs continue to be variable and market linked. This is the tradeoff he has chosen in the interest of protecting the face value of the asset, i.e not having to reduce the amount of debt.

In the second case the debtor offers to exchange existing claims for a long term security with a market-based interest rate, but with a face value less than that of the original obligation. The discount from the original loan gives this instrument the name of discount bond. In this case the loss absorbed by the creditor consists of an upfront reduction in face value of his claims, while a market rate is earned on the reduced principal outstanding.

The bonds essentially amount to concessional long term rescheduling. Both par and discount bonds have, to date, generally been structured with a bullet maturity feature. This means that the principal (face value) is repaid in a single installment upon maturity of the bond, and there is no amortization schedule. Both bonds result in debt service reduction, so the exit cost to creditors is reflected in a lower stream of future interest payments:

- the par bond offers debt service reduction while maintaining constant a given amount of debt, and applying a below market interest rate, while the discount bond offers debt service reduction by reducing the amount of debt and then applying a market interest rate.

Such bonds are often referred to as exit bonds since they are exempt from future new money requests by the debtor. They are also exempt from the sharing and other restrictive linking clauses of the syndicated loan agreements. This makes the bonds more marketable. Debtor countries have traditionally serviced bonds even when they rescheduled loans. The implicit seniority status of the bonds, however, is only credible to the extent that their relative amount remains low relative to debt servicing capacity.

There are at least two alternatives to exit bonds for commercial banks. One is direct loan sale at a discount in the secondary market; the second one is maintenance of the loan on the bank's books and refusal to participate in future new lending. The latter one is the free rider case, and it involves trying to collect full

⁹ In practice there are also instruments which combine features from the par and discount bonds, e.g step up interest rate bonds, front-loaded interest rate bonds, etc.

interest due on outstanding loans without contributing to the fresh money loans which provide in part the resources to pay future interest.

IX. Securitization/Collateralization of Exit Bonds

In order for creditors to participate in an actual transaction involving exit bonds, the bonds must be perceived to be of a different risk category than the existing claims. The process of collateralizing an instrument with another financial instrument of higher grade (lower risk) is known as securitization. Creditors are unlikely to accept a long term discounted bond simply based on the fact that in the past bonds have always been treated as implicitly senior debt. The exit bonds must be collateralized or guaranteed to some extent, both on principal and/or interest, so the risk associated with them is no longer pure country risk.¹⁰

For example, the creditor may seek to be assured that the country will be able to repay the full amount outstanding in year 30. The debtor has to incur some costs in order to provide security for the debt exchange instruments he is proposing, in order to add credibility to the "enhanced value" of these instruments.

X. The Zero Coupon Security

One approach is for the debtor to invest some funds in a high grade security which will mature in thirty years from now, when he needs the funds to repay the principal obligations on his maturing exit bonds. In fact, he can purchase a security with a matching maturity date and face value. The least expensive way for the debtor to assure that the required funds will be available in year 30 is to purchase a zero coupon instrument. This instrument does not pay out interest earnings annually but reinvests them instead. If the annual yield on the zero coupon security is 8.5%, for example, this means that interest will accrue at this rate on the initial price of the instrument, and will be reinvested in the following period. The process will repeat itself until maturity, when the instrument will pay out the initial price plus all the accrued interest over the thirty years. This final sum is the face value of the zero coupon instrument. Because zero coupon bonds pay no interest during their lifetime but return full face value at maturity, such instruments are sold at steep discounts from face value. In the example, a zero coupon bond with a face value of US\$100 in year 30 can be purchased today for US\$8.65. If the yield is higher, at 9.5% for example, the discount in year 1 is even steeper, since more will be earned and reinvested each period. Less is therefore required upfront for the same final face value of US\$100. In fact, the cost of a 9.5% zero coupon bond is US\$6.57 per US\$100 in year 30.

If the debtor had issued a forty year bond as an exchange offer to his creditors instead, and therefore his cash requirement was in year 40, he could purchase a forty year zero coupon bond today to cover his future obligation. For a

¹⁰ However, at least two countries have recently proposed uncollateralized long term bonds as one of their menu options. These have not yet been accepted by creditors.

yield of 8.5%, the upfront cost to him would be lower than in the previous example, because of the greater number of compounding periods. The cost of such a bond with a US\$100 face value would be US\$3.83. (In practice, no forty year bonds have been issued, or used as collateral--the problem in this case, would be to find an issuer of 40 year bonds).

A summary of upfront costs for a series of US\$100 zero coupon instruments based on different assumptions about yields and maturities is given below:

	8%	9%	10%
20 years	21.46	17.86	14.86
30 years	9.94	7.54	5.73
40 years	4.60	3.18	2.21

XI. The Role of Zero Coupon Instruments as Principal Collateral

In practice high grade zero coupon securities with matching maturity and value are held in a trust account as collateral against the principal repayment under the exit bonds. The debtor is required to purchase the highest grade zero coupon in a given currency and pledge the proceeds in Year Thirty to be used for the repayment of principal on the exit bonds it has offered to its creditors. Such zero coupon securities could be issued in their respective currencies by the US, French, German or other OECD treasuries¹¹.

It is essential for creditors that the principal repayment risk on their exchange bonds be reduced effectively to the risk of the US treasury repaying its zero coupon bond obligation to the debtor. Since this is assumed to be essentially riskless, and furthermore the zero coupon collateral instrument is pledged to be used for the specific purpose, creditors can be assured that the exchange bond has a lower uncertainty and hence a higher value than their existing claims. From the creditors' point of view, there is no longer any debtor-country risk associated with repayment of principal, i.e the repayment is fully defeased.

The investment of funds in a high grade zero coupon instrument is the least expensive means of assuring the future availability of funds in terms of upfront costs to the debtor. There is also no further cash outflow from the debtor in year 30 related to repayment of principal. By purchasing as collateral a bond today which will have the needed value upon maturity, the debtor has effectively "prepaid" his obligation.

A collateralized debt defeasance scheme involves a certain "opportunity cost" for the debtor in that a portion of international reserves has to be put aside in

¹¹ In practice there are as yet no thirty year securities issued by the German Treasury.

order to guarantee the principal of the discounted debt. The relationship between that cost and the saving on future debt payments determines a "break-even point" for the country.

It is often asked by observers why this pledging process requires the debtor to invest funds outside the country, and in effect to "lend its funds for thirty years" to an OECD-member treasury. This is a necessary part of the risk reduction process. By definition, if the debtor invested the funds in a domestic zero coupon instrument, this would be useless in achieving the objective since it is precisely the sovereign risk of the debtor country that creditors are trying to avoid.

XII. The Interest Collateral Account

Annual interest payments (fixed rate and below market, or variable rate linked to market) on the exit bonds owed by the country to its creditors will continue to contain some element of country risk, however. Most creditors require that the debtor establish an interest collateral account by depositing cash or marketable securities equivalent to a number of interest payments (e.g. one or two years' worth) in an interest collateral escrow account up front. Earnings on the resources invested in the interest collateral account accrue to the country each year. The interest collateral account is thus kept constant at the agreed amount.

The country is then expected to make its regular interest payments from its own resources year by year. In case of any interruption in payment, creditors have access to the interest collateral account until it is depleted, after which time they may presumably initiate legal proceedings. It is expected by all parties that the country will be fully able to honor its interest obligations, and that the collateral account will not be touched but instead keep on rolling over until the last year of the instrument, when it can be used to make the final interest payments. This collateral account is referred to as the rolling interest guarantee.

XIII. Illustration of a Debt and Debt Service Reduction Operation

A country has US\$100 million of outstanding commercial debt. It has three creditors of different nationalities, A (US\$60 million), B (US\$25 million) and C (US\$15 million). The current secondary market price of the country's debt is 35 cents although almost no trades are taking place at this price.

The country, which has decided to seek no new money at this point, may present its creditors with the following proposal:

- Cash Buyback at 39 cents per dollar of face value, or
- 30 year Par Bond with 6 percent fixed interest rate, 1 year of interest payments collateralized, principal fully collateralized, or

- 30 year Discount Bond (70 percent of face value) at LIBOR+.5%, 2 years of interest payments collateralized, principal fully collateralized.

Creditor A may be undercapitalized and therefore only able to accept instruments which do not require a reduction of principal. (Par Bond)

Creditor B may be provisioned against losses such that it can accept a loss of up to 30%, but no greater. (Discount Bond)

Creditor C may consider its exposure to be small enough that it prefers to "get out" with a 61% upfront loss rather than maintain this debtor on its books. (Cash Buyback)

Under a voluntary market based approach to debt restructuring the country will end up with the allocation of its US\$100 million debt across the three instruments as follows:

Cash Buyback	US\$15 million
Par Bond	US\$60 million
Discount Bond	US\$25 million

After the cash buyback, which retires US\$15 million in face value of debt immediately, the remaining US\$85 million will be converted to par and discount bonds. A further debt reduction will take place at the time the discount bond is issued. The US\$25 million of old debt tendered for that option will be replaced with a new bond of US\$17.5 million face value (70% of US\$25 million). The par bond, as its name suggests, will be issued for the full amount of US\$60 million face value. The country therefore moves from a debt stock of US\$100 million to US\$77.5 million (60+17.5) which must be serviced over 30 years, and in doing so it uses US\$5.85 million of reserves for the buyback (see Section XV).

The debt service relief provided to the country under each of the instruments may be calculated by comparing with the original debt service profile, and attributing the relief proportionally to each of the instruments. For example, 15/100 or 15% of the original debt service obligations are cancelled upfront by the cash buyback, etc.

XIV. Building the Menu

The basic principle in designing the menu is to tailor instruments so that each group of creditors will choose what it values the most. It is important to note that if the country decides to follow the route of the voluntary market based menu approach, it has to ensure that, as long as it has no particular desire to influence creditors' choices, all of the proposed instruments should offer roughly similar net present values of debt service relief. The banks will of course value these instruments differently from the country and from each other in terms of expected net present value of payments and other factors, since they each face a different set of conditions and constraints. This is what will ultimately determine the allocation of eligible debt across the menu items under a voluntary workout.

On the other hand, a country may decide that a particular method of debt reduction confers greater advantages, e.g the cash buyback, because the country strongly prefers immediate cancellation of future debt service obligations. This could be the case if the country felt that a visible, upfront reduction in debt stock would bring added benefits such as increased investor confidence, reduced inflationary expectations, repatriation of flight capital, etc. The country may then wish to price the cash buyback option more attractively than the other menu items, and thus deliberately not attempt to establish equivalency among instruments. This would be done in order to influence banks' behavior in a manner consistent with its desired outcome, while still following the market-based approach. The tradeoff here lies in the known increased upfront costs that will be incurred in offering a higher-priced buyback, against the uncertain value of the added benefits (e.g increased investor confidence) the country is counting on under this strategy.

XV. The Cost of Financing the Menu

The country will only be able to offer a choice to its creditors if it knows that it will be able to finance any given outcome or combination of exchange instruments that creditors may end up selecting. The level of creditor participation will in turn substantially depend on what sort of menu of debt exchange instruments a debtor can offer in order to retire existing claims. At the same time, the creditors' choice of exchange instrument will affect a debtor's upfront cost of funding its debt reduction plan, since each type of instrument offered carries with it a different type of collateral requirement.

In order for the deal described in Section XIII to materialize, the country will have to be able to finance it in the following amounts:

Cash Buyback	(0.39XUS\$15 million)	US\$5.85 million
Par Bond		
Annual Interest Payments Yr 1-30	(0.06X60)	US\$ 3.6 million
Upfront Costs:		
Purchase of US Treasury to secure 60 million of principal in Year 30		US\$ 5.97 million
Interest Escrow Account of 1 year's int. pmt		US\$ 3.6 million
Discount Bond	(LIBOR is assumed to be constant at 8%)	
Principal is reduced from US\$25m to 70% of this, i.e		US\$17.5 million
Annual Interest Payments Yr. 1-30	(.085X17.5)	US\$1.49 million
Upfront Costs:		
Purchase of collateral for principal		US\$1.74 million
Interest Escrow Account		US\$2.9 million

The sum of the upfront costs is $(5.85+5.97+3.6+1.74+2.9)$ US\$20.06 million. Thereafter, the country's annual debt service is $(1.49+3.6)$ US\$5.09 million. In summary, collateral requirements are as follows:

	<u>Principal Collateral</u>	<u>Interest Collateral</u>	<u>Total</u>
Par Bond	5.97	3.6	9.57
Discount Bond	1.74	2.9	4.64
Cash Buyback	5.85	n.a	5.85
Total	13.56	6.5	20.06

XVI. The Role of Multilateral Institutions

As mentioned earlier, the innovation under the so-called Brady Plan was to formally include official sector support in financing packages such as the one shown above. IBRD and IMF, Japan EXIM, other bilateral governments, and most recently the Inter-American Development Bank have participated to date in helping to meet eligible Brady countries' financing needs for their debt reduction agreements with creditors through loans. Broad guidelines used by IBRD and IMF are shown below.

Procedure for use of IBRD Resources

IBRD support for debt and debt service reduction (DDSR) is decided on a case by case basis. The argument for supporting debt reduction must be linked to implementation in the debtor country of growth-oriented medium term adjustment policies in which debt reduction would play a key role in the medium term financing plan.

Bank support will be decided after taking into account:

- the strength of the medium term adjustment program;
- the severity of the debt burden;
- the country's track record;
- the scope for voluntary market based operations;
- the medium term financing plan; and
- the potential benefits from Bank support for investment and growth.

Objectives of the medium term program should include measures to:

- promote domestic savings and investment;
- encourage direct foreign investment;

- encourage capital repatriation.

The existence of debt equity swap programs and adherence to MIGA are seen as useful steps in the investment area.

So-called "set aside funds" would be set aside from the existing lending program and used to support operations involving significant principal reduction. This would include cash buybacks, and purchase of collateral for discount bonds (but not for par bonds, since there is no principal reduction).

Set-asides will be determined on a case-by-case basis but would involve either:

- around 25% of a country's adjustment lending program over a three year period; or
- around 10% of its overall lending program

Set aside funds for debt reduction may be provided through adjustment operations that contain an appropriate debt reduction program component, or they may be provided, in exceptional circumstances, as a "stand-alone" operation, effectively using resources set aside from future loans. Significant front-loading could be considered only when there is strong economic performance and a clear need in terms of the debt reduction program.

Additional resources of up to 15% of the overall three year lending program could also be made available. Such additional resources would be used for interest support in connection with DDSR. This would include the establishing of interest collateral accounts for both par and discount bonds.

Procedure for use of IMF resources

The eligibility requirements in terms of policy reforms are very close to those listed above for IBRD. There must be an ongoing medium term adjustment program with a strong element of structural reform, which is adopted either in the context of stand-by or extended fund facility arrangements (SBAs or EFFs).

IMF support in the form of set asides for DDSR would be determined on a case by case basis and would generally amount to:

25% of access determined on the basis of existing policy under an extended or stand-by arrangement.

Availability of the set-aside amounts would generally be phased in line with program performance. Where warranted, some front-loading could be considered.

The Fund would be prepared to approve requests for additional resources of up to 40% of a member's quota, to be used for interest support, where such resources would be

- decisive in facilitating further cost effective operations and catalyzing other resources, and
- consistent with significant progress towards external viability.

To date, IMF and IBRD have supported the commercial debt workouts of Mexico, Venezuela and Uruguay. A partial buyback was funded for the Philippines and the Fund has also provided retro-

Policy Research Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS800	The Legal Framework for Private Sector Development in a Transitional Economy : The Case of Poland	Cheryl W. Gray Rebecca J. Hanson Michael A. Heller Peter Ianachokov Youssef Djehane	November 1991	CECSE 37188
WPS801	Unraveling the Mysteries of China's Foreign Trade Regime: A View from Jiangsu Province	Arvind Panagariya	November 1991	D. Ballantyne 37947
WPS802	Strengthening the Bank's Population Work in the Nineties	Steven W. Sinding	November 1991	O. Nadora 31091
WPS803	Financial Regulation: Changing the Rules of the Game	Millard Long Dimitri Vittas	November 1991	W. Pitayatonakarn 37666
WPS804	Global Trends in Raw Materials Consumption	Boum-Jong Choe	November 1991	S. Lipscomb 33718
WPS805	Privatization in the Soviet Union: The Beginnings of a Transition	Sergei Shatalov	November 1991	CECSE 37188
WPS806	Measuring Commercial Bank Efficiency: Use and Misuse of Bank Operating Ratios	Dimitri Vittas	November 1991	W. Pitayatonakarn 37666
WPS807	Moderate Inflation	Rudiger Dornbusch Stanley Fischer	November 1991	S. Moussa 33490
WPS808	The New Trade Protection: Price Effects of Antidumping and Countervailing Measures in the United States	Ann Harrison	November 1991	D. Ballantyne 37947
WPS809	Openness and Growth: A Time Series, Cross-Country Analysis for Developing Countries	Ann Harrison	November 1991	WDR Office 31393
WPS810	Poverty and Income Distribution during Adjustment: Issues and Evidence from the OECD Project	Francois Bourguignon Jaime de Melo Christian Morrisson	November 1991	D. Ballantyne 37947
WPS811	Comparative Resource Allocations to Human Resource Development	Peter T. Knight Sulaiman S. Wasty	December 1991	D. Afzal 36335
WPS812	Alternative Forms of External Finance: A Survey	Stijn Claessens	December 1991	S. King-Watson 31047
WPS813	Price Stabilization for Raw Jute in Bangladesh	Takamasa Akiyama Panos Varangis	December 1991	D. Gustafson 33714

Policy Research Working Paper Series

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS814 Finance, Growth, and Public Policy	Mark Gertler Andrew Rose	December 1991	W. Pitayatonakarn 37666
WPS815 Governance and Economy: A Review	Deborah Brautigam	December 1991	Z. Kranzer 37494
WPS816 Economic Consequences of German Reunification: 12 Months After the Big Bang	Gerhard Pohl	December 1991	CECSE 37188
WPS817 How Does Brady-Type Commercial Debt Restructuring Work?	Mohua Mukherjee	December 1991	Y. Arellano 31379